

IN THE CLAIMS:

Please amend the claims as follows:

1-47. Canceled.

48. (New) A method for interfacing a virtual private network (VPN) with a network having a different addressing scheme, the method comprising:

at a VPN media proxy having a communications interface for communicating with a first network and a second network, wherein the first network comprises a plurality of interconnected VPNs, the second network is connected to the plurality of interconnected VPNs via the first network, and the second network uses an Internet protocol (IP) addressing scheme different from a private IP network addressing scheme used by one of the plurality of interconnected VPNs:

providing a plurality of virtual routing functions, respective ones of the plurality of virtual routing functions being connected to respective ones of the plurality of interconnected VPNs such that each virtual routing function has an address in a private IP address space of a respective one of the plurality of interconnected VPNs;

translating a destination IP address of a packet in accordance with the IP network addressing scheme of the second network; and

forwarding the packet from a source IP address in the one of the plurality of interconnected VPNs to the destination IP address in the second network.

49. (New) The method of claim 48 further comprising:

translating a second destination IP address of a second packet in accordance with the IP network addressing scheme of the one of the plurality of interconnected VPNs; and

forwarding the second packet from a second source IP address in the second network to the second destination IP address in the one of the plurality of interconnected VPNs.

50. (New) The method of claim 48 wherein address translation is provided for each of the plurality of virtual routing functions.
51. (New) The method of claim 48 wherein the first network is a public network using a public IP network addressing scheme and the second network is a carrier network using a private IP network addressing scheme.
52. (New) The method of claim 48 wherein another of the plurality of interconnected VPNs uses a second private IP network addressing scheme, the second private IP network addressing scheme utilizing an address, the address also being utilized by the private IP network addressing scheme used by the one of the plurality of interconnected VPNs.
53. (New) The method of claim 48 wherein the packet comprises voice over Internet protocol (VoIP) signaling information.
54. (New) The method of claim 48 wherein the packet comprises voice over Internet protocol (VoIP) bearer information.

55. (New) The method of claim 48 wherein the second network interfaces the first network to a switched telephone network (STN) via a trunk gateway, the trunk gateway having the destination IP address.
56. (New) The method of claim 55 wherein the STN is a public STN (PSTN).
57. (New) The method of claim 48 further comprising storing configuration information for a session to be established between an entity in the one of the plurality of interconnected VPNs and an entity in the second network.
58. (New) The method of claim 57 wherein the configuration information comprises source and destination IP addresses for the entity in the one of the plurality of interconnected VPNs and the entity in the second network.
59. (New) The method of claim 57 wherein the session comprises a voice over Internet protocol (VoIP) session.
60. (New) A virtual private network (VPN) media proxy for interfacing a VPN with a network having a different addressing scheme, the VPN media proxy comprising:

a communications interface for communicating with a first network and a second network, wherein the first network comprises a plurality of interconnected VPNs, the second network is connected to the plurality of interconnected VPNs via the first network, and the second network uses an Internet protocol (IP) addressing scheme different from a private IP network addressing scheme used by one of the plurality of interconnected VPNs;

a routing module for providing a plurality of virtual routing functions, respective ones of the plurality of virtual routing functions being connected to respective ones of the plurality of interconnected VPNs such that each virtual routing function has an address in a private IP address space of a respective one of the plurality of interconnected VPNs;

an address translation module for translating a destination IP address of a packet in accordance with the IP network addressing scheme of the second network; and

a communications module for forwarding the packet from a source IP address in the one of the plurality of interconnected VPNs to the destination IP address in the second network.

61. (New) The VPN media proxy of claim 60 wherein the address translation module is configured to translate a second destination IP address of a second packet in accordance with the IP network addressing scheme of the one of the plurality of interconnected VPNs and wherein the communications module is configured to forward the second packet from a second source IP address in the second network to the second destination IP address in the one of the plurality of interconnected VPNs.
62. (New) The VPN media proxy of claim 60 wherein the address translation module is configured to provide address translation for each of the plurality of virtual routing functions.

63. (New) The VPN media proxy of claim 60 wherein the first network is a public network using a public IP network addressing scheme and the second network is a carrier network using a private IP network addressing scheme.
64. (New) The VPN media proxy of claim 60 wherein another of the plurality of interconnected VPNs uses a second private IP network addressing scheme, the second private IP network addressing scheme utilizing an address, the address also being utilized by the private IP network addressing scheme used by the one of the plurality of interconnected VPNs.
65. (New) The VPN media proxy of claim 60 wherein the packet comprises voice over Internet protocol (VoIP) signaling information.
66. (New) The VPN media proxy of claim 60 wherein the packet comprises voice over Internet protocol (VoIP) bearer information.
67. (New) The VPN media proxy of claim 60 wherein the second network interfaces the first network to a switched telephone network (STN) via a trunk gateway, the trunk gateway having the destination IP address.
68. (New) The VPN media proxy of claim 67 wherein the STN is a public STN (PSTN).
69. (New) The VPN media proxy of claim 60 further comprising a configuration store for storing configuration information for a session to be established between an entity in the one of the plurality of interconnected VPNs and an entity in the second network.

70. (New) The VPN media proxy of claim 69 wherein the configuration information comprises source and destination IP addresses for the entity in the one of the plurality of interconnected VPNs and the entity in the second network.
71. (New) The VPN media proxy of claim 69 wherein the session comprises a voice over Internet protocol (VoIP) session.
72. (New) A non-transitory computer readable medium comprising computer executable instructions that when executed by a processor of a computer perform steps comprising:
- at a VPN media proxy having a communications interface for communicating with a first network and a second network, wherein the first network comprises a plurality of interconnected VPNs, the second network is connected to the plurality of interconnected VPNs via the first network, and the second network uses an Internet protocol (IP) addressing scheme different from a private IP network addressing scheme used by one of the plurality of interconnected VPNs:
- providing a plurality of virtual routing functions, respective ones of the plurality of virtual routing functions being connected to respective ones of the plurality of interconnected VPNs such that each virtual routing function has an address in a private IP address space of a respective one of the plurality of interconnected VPNs;
- translating a destination IP address of a packet in accordance with the IP network addressing scheme of the second network; and

Serial No.: 10/675,645

forwarding the packet from a source IP address in the one of the plurality of interconnected VPNs to the destination IP address in the second network.